

## REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated June 1, 2006. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due consideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

### Status of the Claims

Claims 1-15 are under consideration in this application. Claims 1-15 are being amended, as set forth in the above marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim Applicants' invention.

The claims are being amended to correct formal errors and/or to better recite or describe the features of the present invention as claimed. All the amendments to the claims are supported by the specification. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

### Formality Rejection

Claims 1-15 were again rejected under 35 U.S.C. § 101 because these claims are directed to non-statutory subject matter, especially for not reciting any specific outcome.

As mentioned in the response of November 14, 2004 to the Office Action dated August 17, 2004, Applicants contend that the recitation of "grouping biopolymers in the selected subtree into at least one function group sharing a common one of functional characteristics including enzymatic, metabolic, transporting, and cell cycle functions" and then "displaying the grouping results" are a specific outcome of each independent claim to provide "*functional interrelationship as a part of the stored data ... and the process* (p.2, last line of the office action date August 17, 2004)." Therefore, the claims provide a practical application of the invention in the technological art of gene expression analysis. The Examiner agreed with the Applicants and withdrew the 101 rejection accordingly in the Office action dated January 21, 2005. As such, each of the claims, as a whole, produces a specific outcome of showing/displaying functional interrelationships.

In addition, the following module/means further provide results which are "*concrete, tangible and useful* (see *AT&T*, 172 F.3d at 1358, 50 USPQ2d at 1452) such that the programs/systems as now claimed are statutory program/system claims (see MPEP 2106

(IV)(b)(ii) Computer-Related Processes Limited to a Practical Application in the Technological Arts).

The module/means of “displaying said function group of biopolymers in the separate display window thereby *allowing a user to see in the separate display window more details of the selected subtree* (p. 8, lines 1-3)” recited in claims 1 & 8, visually allows one skilled in the art to see whether relative genes are assembled in the separately displayed subtree, thereby facilitating the above-mentioned grouping and displaying functional interrelationships..

The module/means of “replacing the selected subtree in the dendrogram with an icon thereby *displaying the dendrogram with the icon as a simplified presentation rather than with the selected subtree*” recited in claims 3 & 11, visually allows one skilled in the art to “*observe a global state of the dendrogram* (p. 8, lines 16-17),” thereby facilitating the above-mentioned grouping and displaying functional interrelationships.

The module/means of “displaying the highlighted keywords together with said function group of biopolymers thereby *confirming biopolymers sharing said one of said functional characteristics are grouped in the selected subtree* (p. 5, lines 20-23)” recited in claims 5-6 & 12, visually allows one skilled in the art to “*determine which function or keyword should be focused on* (p. 5, lines 1-4),” thereby facilitating the above-mentioned grouping and displaying functional interrelationships.

Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

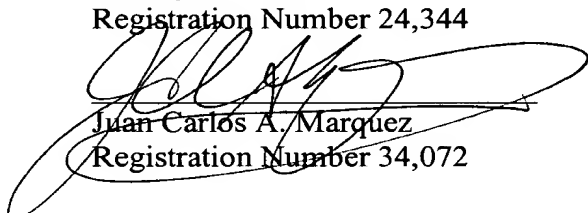
Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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